

ABSTRACT OF THE DISCLOSURE

A device and method for determining at least the left ventricular end diastolic volume LVEDV of a beating heart of in particular a human

5 being, is disclosed, the device comprising

- a current source

- supply electrodes, for supplying alternating current to the body,

- measuring electrodes, for receiving an impedance signal,

- measuring means, for measuring said impedance signal,

10 - a processing unit, for processing and outputting the value of said impedance signal and the first time derivative thereof,

and means for determining the duration DFT of a heartbeat,

and wherein the processing unit is designed for determining and

outputting the value of LVEDV in dependence of both said duration DFT

15 and said impedance and the change of the first time derivative of said impedance during the pre-ejection period.